

# NHDOT SPR2 PROGRAM

## RESEARCH PROGRESS REPORT

<b>Project #</b> 26962X		<b>Report Period</b> Year: 2019 <input type="checkbox"/> Q1 (Jan-Mar) <input type="checkbox"/> Q2 (Apr-Jun) <input type="checkbox"/> Q3 (Jul-Sep) <input checked="" type="checkbox"/> Q4 (Oct-Dec)	
<b>Project Title:</b> LED Snowplow Lights			
<b>Project Investigator:</b> Daniel Fogg <b>Phone:</b>		<b>E-mail:</b>	
<b>Project Start Date:</b> November 1, 2018	<b>Project End Date:</b> December 31, 2020	<b>Project schedule status:</b> <input checked="" type="checkbox"/> On schedule <input type="checkbox"/> Ahead of schedule <input type="checkbox"/> Behind schedule	

### Brief Project Description:

The NHDOT snowplow fleet currently uses halogen lights mounted on the push frame for night time snowplowing operations. Due to the excessive vibration, frequent bulb replacement is necessary and plow drivers have suggested that LED lights improve visibility and reduce fatigue experienced over long hours. This project will compare the use of halogen bulbs to heated/non-heated LED bulbs, targeting Districts 1 and 3 due to the availability of Interstates and rural routes. The results will support whether converting the NHDOT snowplow fleet from halogen bulbs to LED bulbs reduces maintenance requirements, increases service life, improves operator visibility, and is preferable to the traveling public.

### Progress this Quarter (include meetings, installations, equipment purchases, significant progress, etc.):

*LED lights have been installed on 17 of 17 trucks in D1 and 10 of 17 trucks in D3. Surveys are being completed by operators and supervisors. There have not been any public surveys returned at this time.*

### Items needed from NHDOT (i.e., Concurrence, Sub-contract, Assignments, Samples, Testing, etc.):

*No items are needed.*

### Anticipated research next three(3) months:

*LED research start date 10/14/19 with advent of winter snow removal activities in D1.*

### Circumstances affecting project:

*None.*

Tasks (from Work Plan)	Planned % Complete	Actual % Complete
1 <sup>st</sup> Quarter Task 1, Bidding and purchase of LED lights. Project delayed	100	100
1 <sup>st</sup> Quarter Task 2, Installation of lights.. Project postponed due to bidding/purchase delay. Start date 11/1/19.	100	80
2 <sup>nd</sup> Quarter Task 1, Safe storage of LED lights.	100	100
3 <sup>rd</sup> Quarter Task 1, Operator Meeting 10/10/19	100	100
3 <sup>rd</sup> Quarter Task 2, Light Installation 10/14/19	100	80
4 <sup>th</sup> Quarter Task 1, Completion of Light Installation 12/31/19	100	80